UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,910	12/19/2001	Shigeo Nakagaki	217656US-3TTC CONT	9815

22850 7590 12/04/2006

C. IRVIN MCCLELLAND
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
LILLIS, EILEEN DUNN	
ART UNIT	**PAPER NUMBER**
3652	

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/020,910
Filing Date: December 19, 2001
Appellant(s): NAKAGAKI ET AL.

Christopher D. Ward
For Appellant

EXAMINER'S ANSWER

This is in response to the Order Returning Undocketed Appeal to the examiner for because in the Examiner's answer of January 30, 2006 the Evidence Relied upon

section was incorrect. The rest of the answer is the same as the Answer mailed January 30, 2005. The Reply Brief mailed March 27, 2005 does not need to be resubmitted since the examiner noted it on August 9, 2006. The examiner's answer of January 30, 2006 was in response to the appeal brief filed August 1, 2005 appealing from the Office action mailed November 3, 2004.

This is in response to the appeal brief filed August 1, 2005 appealing from the Office action mailed November 3, 2004.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5899301	**Aulanko et al**	**5-1999**
4848519	**Ericson et al**	**7-1989**

Applicant's admitted prior art of Fig 2.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aulanko et al. 5,899,301 in view of admitted prior art (Figure 2), and further in view of Ericson et al. 4,848,519.

Aulanko et al. '301 disclose an elevator system comprising a driving unit 1 mounted on a guide rail 6 and configure to move a movable unit 54 up and down by driving a cable 54. Aulanko et al '301 do not disclose how specifically the guide rail is attached to a side wall of the hoistway.

The admitted prior art Figure 2 shown a guide rail is attached to a side wall by a plurality of U-shaped support member 1 and a plurality of plates attached to a respective rail support member of the plurality of rail support members.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized a U-shaped rail support members and a plurality of plates to connect guide rail system of Aulanko to the side wall as shown in the admitted prior Figure 2 as one of the conventional ways for mounting an elevator guide rail.

Ericson et al. '519 disclose an elevator guide rail 125, Fig. 1, installed in an elevator shaft via a plurality of rail support members wherein at least one of the rail support member 265 fixed to a wall of the shaft by a at least two bolts separated from each other by an interval in the vertical direction, and the anchor bolts comprise upper and lower pair, each pair of the anchor bolts are separated by an interval in the horizontal direction.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to secure the guide rail of modified elevator system of Aulanko with at least two pairs of securing members separated with each other by an interval in both vertical and horizontal direction as disclosed by Ericson since it was known in the art that mounting the securing members by an interval in the vertical direction would prevent the support members from bending due to the total vertical load of the driving unit and the movable unit, and separating the securing members in the horizontal direction would prevent the support members from twisting due to the lateral movement of the movable unit.

Re the equation for calculating the safety range for the interval of the securing members, it would have been obvious to one having ordinary skill in the art at the time the invention was made to separating the securing members in the vertical direction within a safety range, since it has been held that where the conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

(10) Response to Argument

In response to appellant's remarks on page 6 that elevator systems in which a drive unit is mounted to a structure other than the guide rail is significantly different than a configuration in which the drive unit is mounted to the guide rail, the primary reference Aulanko et al. disclose an elevator system having a drive unit mounted on the guide rails as in the claim invention.

Appellant argues in page 7, last paragraph to page 8, line 3 that one of ordinary skill in the art would not have looked to the teaching of Figure 2 (admitted Prior Art) and Ericson et al. reference for mounting configurations for the guide rails in Aulanko et al. Figure 2 (admitted prior art) shows one of conventional way for mounting an elevator guide rails to an elevator hoistway which is using U-shaped rail support members, and plates to connect guide rails to hoistway wall, and Ericson et al shows a conventional way of mounting a guide rail to the hoistway wall by using a bracket having a plurality of bolts to prevent the mounting brackets from buckling due to twisting and bending forces. Therefore, it is reasonable for one ordinary skill in the art to look to and utilize the teaching of Figure 2 (admitted prior art) and Ericson et al. reference for mounting

configurations for the guide rails of Aulanko's elevator system. And further, the teaching of using more than two (2) bolts for securing a bracket to a hoistway of Ericson is considered as simpler mechanical technologies.

In response to appellant's argument on page 8, second paragraph that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such, a reconstruction is proper. See In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to appellant's argument on page 8, third paragraph that it is unclear whether the configuration of Figure 2 (admitted prior art) could support the loads present in a system where the drive unit is mounted on a guide rail, it is noted that whether the drive unit is mounted on the guide rail or not, the guide rails must support loads from the traveling of the elevator car.

In response to appellant's argument on page 9, first and second paragraphs that the guide rails of Ericson et al do not carry the weight of features other than themselves, but rather are intended to maintain the lateral stability of the elevator, thus one of ordinary skill in the art would not have looked to this reference for the teaching of a mounting system capable of mounting a guide rail upon which a drive unit is mounted, it is noted that the Office relied on the teaching of the a bracket utilizing a plurality of bolts

in Ericson reference for securing guide rails, not bodily incorporated. Further, the motivation to combine come from the nature of the problem to be solved. In this case, it is particularly relevant with simpler mechanical technologies that is to use a plurality of bolts to prevent the bracket from buckling due to twisting and bending forces.

In response to appellant's arguments on last paragraph of page 9, there is only one fixture (256) shown in Ericson et al. because it appears that the additional row of bolts to the fixture is a result of the larger size of the fixture, rather than a need to increase the vertical support of the guide rail, firstly, it is well known that having more bolts would provide stronger support, secondly, the claimed invention requires only one guide rail and one fixture mounted by at least two vertically spaced lines of securing members. Further, appellant argues that the fixture (265) is provided for lateral stability, not vertical support. It is inherently well known in the simpler mechanical technologies that having more bolts in a horizontal line would provide better lateral support, and more bolts in a vertical line would provide better vertical support. And Ericson et al. does show a bracket being mounted to the wall by at least two vertically spaced lines of securing members.

In response to appellant's argument that Aulanko et al. fails to appreciate the need for increased strength or support for a guide rail upon which a drive unit is mounted, and thus does not teach one of skill in the art a need for a specialized mounting for the guide rail, the Aulanko et al. reference does not show how the guide rails are mounted to the elevator shaft because it is old and well known in the mechanical art that more fasteners means stronger.

In response to appellant's argument on last paragraph of page 10 that Ericson et al. and Figure 2 of the present application should not be combined with Aulanko et al., since Ericson et al and Figure 2 are directed to distinctly different configurations, the Office relies solely on the teaching of a guide rail being mounted by a bracket and a plurality of bolts which is common knowledge in the static structure, not where the drive unit being mounted.

In response to appellant's remarks of second and third paragraphs of page 11, the Appendix attached to the Request For Consideration filed on August 2, 2004, having a plurality of bolts arranged in the horizontal line would support a mounting bracket from lateral twisting force, and a plurality of bolts arranged in the vertical line would support a bracket from bending force are well known in the mechanical field.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Conferees:

Eileen D. Lillis
Thomas J. Brahan TJB 11/6/06
Thuy V. Tran TVT

EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600